Assigned Design Values 2003 IBC

Design Assistance Bulletin #3

Wind Design

- **Conventional Light Frame Construction.** Wood framed buildings built with prescriptive techniques as required by IBC section 2308 are deemed to meet the design requirements of IBC chapter 16. Design of non-compliant portions is allowed.
- **ASCE Method.** ASCE standard #7 section 6 may be used to determine wind loads.
- **Simplified Method.** IBC section 1609.6 may be used to determine wind loads fro buildings not exceeding 60' in height.
- **SBCCI Method.** SBCCI SSTD 10 *Standard for Hurricane Resistant Residential Construction* may be used for group R2 and R3 buildings.
- **AF&PA Method.** AF&PA *Wood Frame Construction Manual for One and Two Family Dwellings* may be used for residential structures.
- **Metal Flagpoles.** NAAMM FP 1001 *Guide Specifications for the Design of Metal Flagpoles* may be used for metal flagpoles.
- **TIA/EIA-222.** Antenna supporting structures and antennas may use TIA/EIA-222 for wind design.
- **Basic Wind Speed.** The 3-second gust (V_{3S}) assigned value is 85.
- **Exposure Category.** Exposure factors are site dependant with the valley floor categorized, as Exposure B. Hillside properties will often fall into Exposure C classification.

Earthquake Design

- **Conventional Light Frame Construction.** Wood framed buildings built with prescriptive techniques as required by IBC section 2308 are deemed to meet the design requirements of IBC chapter 16. Design of non-compliant portions is allowed.
- **Ground Motion Acceleration.** The IBC requires ground motion acceleration to be determined by either General Procedure (IBC section 1615.1) or Site Specific Procedure (IBC section 1615.2). Either method is acceptable with the exception that for parcels with a site class of "F" the general procedure may not be used.
- **Site Class.** Site class is to be determined by geotechnical evaluation. Please note that the evaluation must be performed by appropriately licensed persons. Evaluation reports for seismic design categories D, E or F must include all of the information detailed in IBC section 1802.2.7.

Snow Loads

- **Ground snow loads.** Assigned ground snow loads are 25 pounds per square foot up to and including elevations of 500' above sea level. Elevations above 500' will have an assigned snow load of 30 pounds per square foot.
- **Drifting.** Drifting must be analyzed for buildings other than one or two family residences.

Frost Depth

- **Assigned frost depth.** Bottoms of footings must be a minimum of 12" below finished grade. Please note that the building code will often require deeper footings.